

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JOHN HARTUNG and DAVID MALAH

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Appeal No. 2002-0764  
Application 09/131,960

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ON BRIEF

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Before THOMAS, HAIRSTON, and RUGGIERO, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 28.

The disclosed invention relates to a system and method of coding a video signal.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A method of coding a video signal, the video signal comprising a sequence of video frames, the sequence of video frames comprising a sequence of subsequences of said video frames, the method comprising the steps of:

determining a coding quality measure for one or more of the video frames comprised in one of said subsequences of said video frames;

selecting a particular one of the video frames comprised in said one of said subsequences of said video frames, the selection based on the coding quality measure therefor; and

coding the selected video frame as representative of said one of said subsequences of said video frames.

The references relied on by the examiner are:

Huelsman	4,183,087	Jan. 8, 1980
Gonzales et al. (Gonzales)	5,231,484	July 27, 1993
Golin	5,265,180	Nov. 23, 1993
Schuster et al. (Schuster)	5,778,192	July 7, 1998

(filed Oct . 26, 1995)

Claims 1, 6, 7, 9, 15, 20, 21 and 23 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Golin.

Claims 2 through 4, 8, 10, 16 through 18, 22 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Golin.

Claims 5 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Golin in view of Schuster.

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Claims 11, 12, 25 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Golin in view of Gonzales.

Claims 13 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Golin in view of Huelsman.

Claims 14 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Golin in view of Huelsman and Gonzales.

Reference is made to the first Office Action (paper number 5), the briefs (paper numbers 11 and 13) and the answer (paper number 12) for the respective positions of the appellants and the examiner.

#### OPINION

We have carefully considered the entire record before us, and we will reverse the anticipation rejection of claims 1, 6, 7, 9, 15, 20, 21 and 23, and the obviousness rejections of claims 2 through 5, 8, 10 through 14, 16 through 19, 22 and 24 through 28.

Anticipation is only established when a single prior art reference discloses every limitation of the claimed invention, either explicitly or inherently. Glaxo Inc. v. Novopharm Ltd., 52 F.3d 1043, 1047, 34 USPQ2d 1565, 1567 (Fed. Cir.), cert. denied, 516 U.S. 3378 (1995). The examiner has made findings (first Office Action, page 2) that Golin discloses all of the limitations of claims 1, 6, 7, 9, 15, 20, 21 and 23. According

to the examiner, "Golimn [sic, Golin] discloses a system and method for coding a video signal comprising a sequence of subsequences of video frames (Fig. 1, element 102), the apparatus comprising: means for determining a coding quality measure (Fig. 1, element 110) for one or more of the video frames; means for selecting (Fig. 2, element 202) a particular one of video frames based on the coding quality measure; and means for coding (Fig. 1, element 116) the selected video frame as specified in claims 1 and 15."

Golin discloses a method of encoding a sequence of images via a two-pass procedure. During the first pass of the sequence of images 102 (Figure 1), the method determines the complexity<sup>1</sup> 110 of each image in the sequence of images (column 4, lines 3 through 14), and after the first pass of the sequence of images has been completed, the same sequence of images undergoes a second pass wherein the sequence of images is compressed using the determined complexity value (column 4, lines 47 through 56).

Appellants argue (brief, page 5) that Golin does teach "selecting a subset of the video frames for coding and allowing

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<sup>1</sup> Complexity is defined in Golin as "a measure of the difficulty of compressing an image; that is, the number of bits necessary to obtain acceptable image quality" (column 1, lines 55 through 57).

each coded frame to serve as representative of a subsequence of multiple video frames." Appellants argue (brief, pages 5 and 6) that "element 202 does not, in fact, *select* a particular one of the video frames, as required by the claims . . . ," and that "whereas element 116 of Fig. 1 of *Golin* most certainly codes a video frame, it does not code a selected video frame as representative of a subsequence of frames, as is required by the instant claims."

We agree with appellants' arguments. Element 202 in *Golin* (Figure 2) selects a target frame from the sequence of images for a complexity analysis (column 5, lines 1 through 34), and this value is then used in the second pass of the sequence of images to thereby compress the complete sequence of images. In other words, element 116 in *Golin* does not compress the target image selected by element 202. Thus, the anticipation rejection of claims 1, 6, 7, 9, 15, 20, 21 and 23 is reversed because "*Golin* describes no more than methods of computing a complexity measure that it then uses in deciding how to code (*i.e.*, "compress," in *Golin's* terminology) each image -- not whether to code ("compress") a given image" (reply brief, page 5). The obviousness rejections of claims 2 through 5, 8, 10 through 14, 16 through 19, 22 and 24 through 28 are reversed because the

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teachings of Schuster, Gonzales and Huelsman do not cure the noted shortcomings in the teachings of Golin.

DECISION

The decision of the examiner rejecting claims 1, 6, 7, 9, 15, 20, 21 and 23 under 35 U.S.C. § 102(b) is reversed, and the decision of the examiner rejecting claims 2 through 5, 8, 10 through 14, 16 through 19, 22 and 24 through 28 under 35 U.S.C. § 103(a) is reversed.

REVERSED

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
KENNETH W. HAIRSTON	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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	)	
JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	

KWH:dal

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